Avid® NewsCutter®

System Integration Guide

for the Compaq® Evo Workstation W8000
Release 3.x

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Chapter 1

Document Overview

This guide covers the Avid® NewsCutter® product integration on the Compaq® Evo Workstation W8000 system. As other platforms are qualified, they will either be added to this guide or explained in a separate document.

This guide is not designed as a replacement for the Avid Certified Resellers class.

This chapter contains the following sections:

- Who Should Use This Guide
- About This Guide
- Symbols and Conventions
- Differences Between IBM and Compaq Systems
- If You Need Help
- Related Information
- If You Have Documentation Comments
- How to Order Documentation
- Avid Educational Services

Who Should Use This Guide

This guide is intended for service personnel who are installing, managing, maintaining, or repairing the NewsCutter system. It describes the procedures necessary to make changes to a Compaq W8000 system and how to integrate the Avid hardware and application software to produce a fully integrated NewsCutter system.

About This Guide

The guide is designed as a reference to answer questions that involve integrating the hardware and the application software into a NewsCutter system. This guide is *not* designed as a Windows® troubleshooting guide.

The Contents lists all topics included in this guide. They are presented with the following overall structure:

- Chapter 1, "Document Overview," provides information about this guide and how you would use it.
- Chapter 2, "System Overview," explains the Compaq W8000 system including the controls, indicators, and connectors. The chapter also introduces the Avid board set and other components used to make up a NewsCutter system.
- Chapter 3, "Installing Memory, the Avid Board Set, and the Fan Assembly," explains how you would check the Compaq W8000 system as it is shipped by Compaq, install memory, install the Avid boards, and install the fan assembly.
- Chapter 4, "Changing System BIOS and Creating a Windows 2000 Image," explains how to enter, make changes, save, and exit the system BIOS. The Avid Setup and Product Recovery CD-ROM is explained in this chapter along with how to create paging files on the NewsCutter system.
- Chapter 5, "Installing and Verifying Avid System Software," explains how you install and verify the Avid drivers.

- Chapter 6, "Troubleshooting," provides instructions on creating boot and Windows 2000 emergency repair disks, testing the system, and striping. Solutions to possible problems you might encounter during the integration of the system are also included.
- Appendix A, "Regulatory and Safety Information," provides regulatory and safety notices for the system.
- Finally, a detailed Index helps you quickly locate specific topics.

Do not use this guide to integrate another vendor platform. While much of the content is applicable to other platforms, there are specific steps that are not relevant to other systems.

Symbols and Conventions

Unless noted otherwise, the material in this document applies to the Windows 2000 operating system.

The system integration guide uses the following special symbols and conventions:

1. Numbered lists, when the order of the items is important.
    a. Alphabetical lists, when the order of secondary items is important.
- Bulleted lists, when the order of the items is unimportant.
    - Indented dashed lists, when the order of secondary items is unimportant.
- ▶ One arrow indicates a single-step procedure. Multiple arrows in a list indicate that you perform one of the actions listed.

`Courier Bold` font identifies text that you type.

Look here in the margin for tips.

In the margin, you will find tips that help you perform tasks more easily and efficiently.

A note provides important related information, reminders, recommendations, and strong suggestions.

A caution means that a specific action you take could cause harm to your computer or cause you to lose data.

A warning describes an action that could cause you physical harm. Follow the guidelines in this guide or on the unit itself when handling electrical equipment.

Differences Between IBM and Compaq Systems

Table 1 lists some of the major differences between the IBM® IntelliStation® Z Pro 6866 system with skews (6AU and 6AG) and the Compaq W8000 system.

Table 1 does not show every detailed change between the systems, but provides a high-level view of the major differences between the systems.

Table 1 Differences Between Systems

IBM System	W8000 System
AGP board is Matrox® G450 (board is removed during integration)	The default AGP board is used as a video source for the Bin monitor in a dual-monitor configuration. At this time the default is the Matrox G450 AGP board. This can change at any time.
Processor speed 933 MHz	Processor speed 1.7 GHz (at first customer ship)
Internal system disk is SCSI, 18.2 GB	Internal system disk is IDE, 40 GB (at first customer ship)
MIDI support on the system board	MIDI support using USB-to-MIDI converter
Non-LVD drives were supported on the system	Only LVD drives are supported on the system
Two USB ports	Four USB ports (two when the rack-mount kit is installed)

If You Need Help

If you are having trouble using the system, you should:

1. Retry the action, carefully following the instructions given for that task in this guide. It is especially important to check each step of your workflow.
2. Check the release notes supplied with your Avid application for the latest information that might have become available *after* the hardcopy documentation was printed.
3. Check the documentation that came with your Avid application or your hardware for maintenance or hardware-related issues.
4. Visit the online Knowledge Center at www.avid.com/support. Online services are available 24 hours per day, 7 days per week. Search this online Knowledge Center to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read/join online message-board discussions.
5. For Technical Support, please call 800-800-AVID (800-800-2843).

   For Broadcast On-Air Sites and Call Letter Stations, call 800-NEWSDNG (800-639-7364).

Related Information

The following documents provide more information about the hardware and software for your system:

- An *Evo W8000 Hardware Reference Guide* (sometimes referred to by Compaq as a user's guide) can be found in PDF format on the Workstation Reference Library CD that ships with the Compaq W8000 system. You can also find a copy on the Compaq Web site.
- *Avid NewsCutter Setup Guide*
- *Avid NewsCutter Site Preparation Guide* (online version)
- *Avid NewsCutter Release Notes*
- *Avid MediaDrive rS LVD Setup and User's Guide*

- *Avid MediaDock LVD Setup and User's Guide*
- *Avid Products Collaboration Guide*

  This guide provides step-by-step instructions for transferring project files, audio files, and graphics and effects files between various Avid products.

  The most recent update of the *Avid Products Collaboration Guide* is provided online. Check the release notes supplied with your Avid application for information on accessing online documentation.

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Chapter 2

System Overview

Avid uses the Compaq W8000 system and an Avid board set to create the NewsCutter editing system. This chapter provides an overview of the Compaq W8000 system, the board set, the supported disk controllers, and the Meridien™ I/O box.

This chapter contains the following sections:

- System Integration Check List
- Compaq W8000 System Overview
- Hardware Configurations
- Meridien I/O Box Overview

System Integration Check List

To integrate a Compaq W8000 system you should use the integration check list provided in this section. The check list provides a step-by-step list of what is needed to complete the integration of the hardware.

Read the check list completely prior to actually starting the integration for an understanding on how to fully integrate and create a NewsCutter system using the Compaq W8000 system.

To create a NewsCutter system you need to follow the actions explained in Table 2.

Table 2 Hardware Integration Check List

Action	Explanation
Read the Document Overview.	Read the "Document Overview." This gives you an idea of what is in this document and how you should use it. See Chapter 1.
Understand the Compaq W8000 system.	Read the "System Overview." This familiarizes you with the Compaq W8000 system and some of the precautionary steps you might need to take when maintaining the system. See Chapter 2.
Connect the basic system components.	Connect the peripherals needed to turn the system on, configure the system, and access the Windows operating system. See the *Avid NewsCutter Setup Guid*e for more information. This would include connecting at least the: • Keyboard and mouse • Monitor • Power cords
Perform the basic integration of the Compaq W8000 system.	Confirm that the basic Compaq W8000 system is working as shipped by Compaq. When you know the system is working *before* you install any hardware, it helps you to resolve any problems you might encounter after you install memory, the Avid board set, or the fan assembly. This indicates that the problem was introduced *after* you installed these items. See Chapter 3 for more information.
Add memory to the system.	"Installing Memory" on page 41 provides memory requirements. An *Evo W8000 Hardware Reference Guide* (sometimes referred to by Compaq as a user's guide) can be found in PDF format on the Workstation Reference Library CD that ships with the Compaq W8000 system. You can also find a copy on the Compaq Web site. Compaq explains how to add or exchange memory on the system. *If you add memory to the Compaq W8000 system, you must increase the paging file. See "Setting the Proper Paging File" on page 66.*

Table 2 Hardware Integration Check List (Continued)

Action	Explanation
Install the Avid board set.	While installing the Avid board set, decide if you want a single- or dual-monitor configuration. A dual-monitor configuration requires you to install the AGP board. The Avid boards include the following: • Meridien digital media board set • Edit display controller board • (Option) Serial data transport interface (SDTI) adapter board *When installing boards into a Compaq W8000 system, refer to the slot guide label on the inside cover.* • (Option) Disk controller board See "Installing Avid Boards" on page 43 for more detailed information.
Installing the fan assembly.	Follow the instructions in "Reinstalling the Fan" on page 54.
Connect the monitor.	In a single-monitor configuration, connect the monitor to the edit display controller board. See "AGP Board" on page 44 for information you need to know when using a single- or dual-monitor configuration.
Attach the application key (dongle).	Attach the application key to the USB port at the rear of the system. See "External Connections" on page 23. The *Avid NewsCutter Setup Guide* also explains how to connect the application key.
Connect the Meridien I/O box.	Connect the Meridien I/O box to the system. Use the *Avid NewsCutter Setup Guide* to connect the Meridien I/O box.
Connect the disk drives.	Connect SCSI drives to the Compaq SCSI connector or an optional Fibre Channel board. The drive types depend on your configuration. See the storage setup guide for the specific drives you are using.
Connect all power cables.	Make sure the power cables are connected to each device, including disk drives, monitors, and the Meridien I/O box.

Table 2 Hardware Integration Check List (Continued)

Action	Explanation
Change the BIOS and install the Avid disk image.	"Changing the System BIOS Settings" on page 64 explains how to change the BIOS and "Using the Avid Product Recovery CD-ROM" on page 59 explains how to restore the NewsCutter system to the configuration as it is shipped from Avid.
Install and verify the Avid drivers.	Chapter 5 explains how to install the Avid drivers and verify that the drivers are installed and started. See the *Avid NewsCutter Release Notes* for more information on installing the software. Drivers are installed with the software.
Test the system.	Test the system to see if the integration went properly. See "Testing the System" on page 88.
Create a Windows 2000 emergency repair disk.	See "Creating a Windows 2000 Emergency Repair Disk" on page 87.

Compaq W8000 System Overview

The Avid NewsCutter system in Release 3.*x* is built around the Compaq W8000 system. The following sections explain some of the major portions of the Compaq W8000 system.

This guide frequently refers to the hardware reference guide for the Compaq W8000 system as a location for instructions and general information. It is sometimes referred to by Compaq as a user's guide and can be found in PDF format on the Workstation Reference Library CD that ships with the Compaq W8000 system. You can also find a copy on the Compaq Web site.

Microprocessor Support

Although Avid ships systems with one microprocessor, Compaq supports up to two Intel® Xeon™ microprocessors with 512K of L2 cache memory integrated into the microprocessor.

The system speed might increase without notice.

If you install dual microprocessors, NewsCutter Release 3.*x* will *not* realize any performance gains from a second microprocessor; it is a single-threaded application.

Memory Support

The memory used by the Compaq W8000 system has the following requirements:

- 800-MHz, direct Rambus® inline memory modules (RIMM).
- Error correcting code (ECC) dynamic random access memory (RDRAM).
- Avid has qualified the 128-MB and 256-MB RIMMs.

The memory modules must be installed in pairs of the same size.

- The memory modules are plugged into an eight-slot memory card. The recommended memory for a NewsCutter system is 512 MB (256 MB minimum).

See the hardware reference guide for the Compaq W8000 system for instructions on how to install the RIMM memory. Purchase additional memory through a local source based on the manufacturer's documentation.

Control and Status Indicators

Figure 1 shows the locations of the control and status indicators located on the front of the Compaq W8000 system. Table 3 describes the function of each control and status indicator.

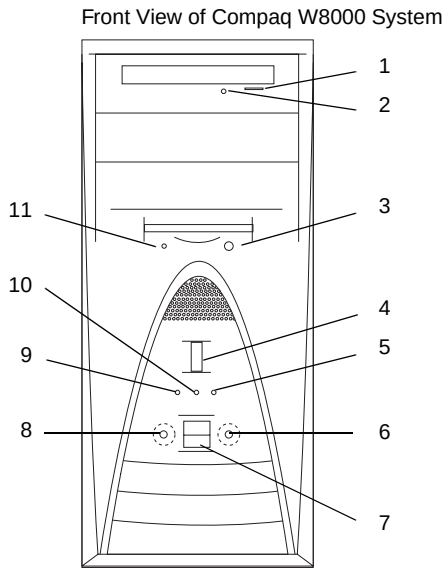

Figure 1 Control and Status Indicators

Table 3 Control and Status Indicators

Item	Function	Item	Function
1	CD-ROM drive Eject button	7	Two USB connectors
2	CD-ROM drive light	8	Headphone connector
3	Floppy drive Eject button	9	Power-on light
4	Power button[a]	10	Hard drive activity light
5	Network link/activity light	11	Floppy drive light
6	Microphone connector		

a. You might need to press and hold the Power button for 4 or 5 seconds to turn off the power.

External Connections

Figure 2 shows the connections located on the rear of the Compaq W8000 system. Table 4 describes the function of each connector. For additional information on the external connections, see the *Avid NewsCutter Setup Guide*.

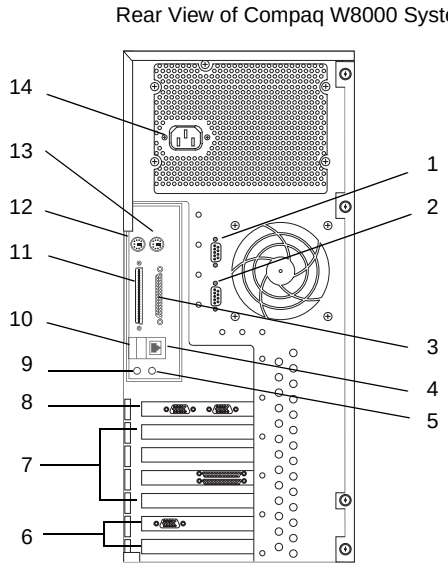

Figure 2 External Connections

The AGP slot (shown as item number 8) is removed when using a single-monitor configuration. Slot allocation is explained in "Installing Avid Boards" on page 43.

Table 4 External Connections

Item	External Connector Function
1	Serial port B connector
2	Serial port A connector

Table 4 External Connections (Continued)

Item	External Connector Function
3	Parallel port connector
4	Ethernet connector
5	Audio Line In connection
6	64-bit PCI (slots 6 and 7)
7	32-bit PCI (slots 2, 3, 4, and 5)
8	AGP (slot 1) Not installed in a single-monitor configuration
9	Audio Line Out connection
10	Two USB ports (one port is used for the new-style dongle)
11	External 68-pin SCSI connector
12	Keyboard connection
13	Mouse connection
14	Power cord connection

Keyboard and Mouse

Avid replaces the standard Compaq keyboard with a customized keyboard featuring labeled keycaps for the NewsCutter system.

The three-button Compaq mouse is the standard. Avid might replace the standard mouse with a Microsoft® mouse for NewsCutter. Whatever mouse is used, it must have a PS/2-style male connector to plug into the system.

Monitors

NewsCutter systems support the following monitors:

- The 21-inch User Interface (UI) monitor — displays the Windows operating system desktop including the Avid software editing environment.
- The Playback monitor (also called *Client monitor*) displays full-screen video playback and can be either an NTSC monitor or a PAL monitor. This monitor is optional.

The Playback monitor is customer supplied.

NewsCutter systems also support other size monitors. You can use most 17-inch multisync monitors in place of the 21-inch monitor.

Service Packs

Service Pack 2 is the qualified Windows 2000 service pack on the Compaq W8000 system. Avid does not provide service packs.

Networking

Most NewsCutter systems are sold into a workgroup environment. In this environment there could be a Fibre Channel and an Ethernet network. Avid recommends you determine the type of network used and set the system up according to your network administrator and the workgroup documentation.

Hardware Configurations

NewsCutter Release 3.*x* ships from Avid on the Compaq W8000 system.

The IBM IntelliStation Z Pro 6866 platform was supported up to NewsCutter Release 3.0. The Compaq Professional Workstation AP500 platform was supported up to NewsCutter Release 2.6.

Internal Drives and Drive Bays

The Compaq W8000 system contains removable disks as well as an internal hard drive.

- **Removable disks** — a 1.44-MB, 3.5-inch floppy drive (controlled by an onboard floppy controller) and an IDE CD-ROM
- **Internal hard drive** — a 40-GB IDE system hard drive (the drive size might change at any time without notice)

There are seven internal drive bays located in the Compaq W8000 system. Access to drive bays 4 to 7 is through the front of the system. You must remove the side panel for access to drive bays 1 to 3 (see Figure 3).

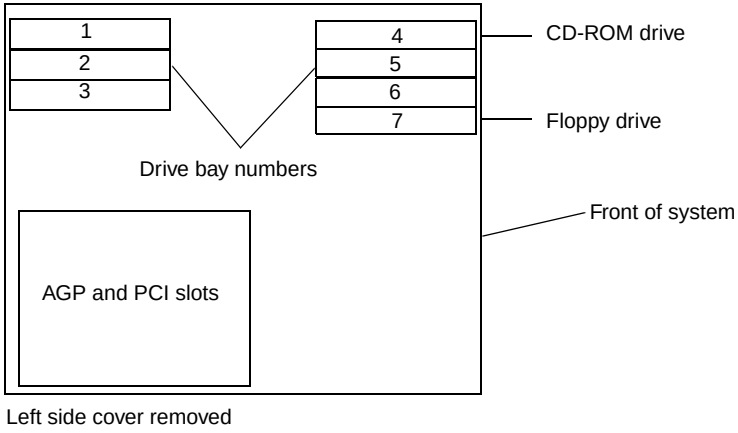

Figure 3 Compaq W8000 Internal Drive Bay Locations

Internal Disk Controllers

The Compaq W8000 system has an internal floppy controller (not discussed) that controls a floppy drive in drive bay 7 (see Figure 3). The remaining two internal disk controllers are:

- An IDE controller with channels 0 and 1. Each channel has a master and a slave connection. The system drive is connected to channel 0 as a master device and there is no slave device attached. Channel 1 has a cable with two connectors; one connects to the CD-ROM drive (set as master) in drive bay 4, and an empty connector you could use to connect an IDE device in drive bay 5 or 6.
- A two-channel Ultra 160 LVD SCSI controller:
  - **Channel A:** Channel A has a SCSI cable connected to it internally. Avid does not support any internal SCSI drives attached to this channel.
  - **Channel B:** Channel B connects the internal controller with the external 68-pin SCSI connector on the rear of the system.

Avid uses the power connector provided for one of the drive bays to power a fan needed to cool the Avid board set.

If you need to stripe across two channels to store media, install an optional Ultra 160 LVD SCSI PCI board.

Avid supports only LVD drives off the channel B external 68-pin connector. Avid does *not* support any internal drives on SCSI bus channel A.

Slot Assignments

All systems shipped directly from Avid have the standard peripheral boards already installed in the NewsCutter system and Meridien I/O box. Optional peripheral boards, such as an SDTI adapter board, are not installed.

Compaq W8000 System

The Compaq W8000 system provides seven expansion slots. The accelerated graphics port (AGP) board in slot 1, *must be removed* if you are using a single-monitor with your NewsCutter system. The Meridien digital media board set and edit display controller (EDC) board are preinstalled.

Figure 4 identifies the slots and the installed boards for the Compaq W8000 system. Table 5 lists the expansion slot assignments for the installed and optional boards.

If you are installing an SDTI adapter board into a system other than a Compaq W8000, refer to the SDTI installation instructions that come with your kit for slot placement guidelines.

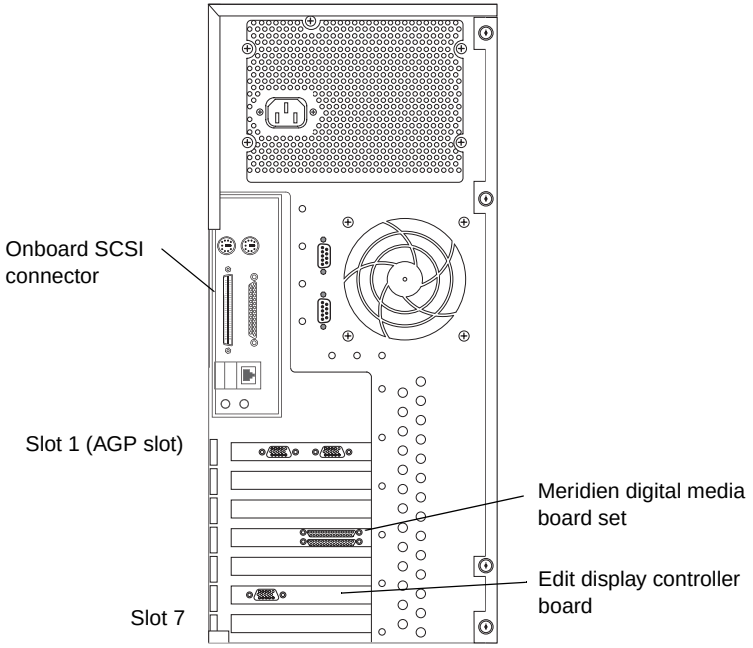

Figure 4 Expansion Slots and Connectors

Table 5 Avid NewsCutter Expansion Slot Assignments

Slot[a]	Description
1 AGP slot	AGP board (removed for single-monitor configuration)
2 PCI slot (32-bit bus)	(Option) Fibre Channel board to Avid Unity™ system or Fibre Channel board to playback device
3 PCI slot (32-bit bus)	(Option) Ultra 160 SCSI LVD controller board
4 PCI slot (32-bit bus)	Meridien digital media board with DV daughter board
5 PCI slot (32-bit bus)	(Option) SDTI adapter or available slot
6 PCI slot (64-bit bus)	Edit display controller (EDC) board
7 PCI slot (64-bit bus)	(Option) MPEG SDTI-CP adapter[b] or available slot (a digital media board cannot be used)

a. An Avid slot guide sticker provides specific PCI slot locations for each PCI board in the NewsCutter system. The slot guide sticker is on the inside of the panel you remove when accessing the PCI boards.

b. Under development, see "MPEG Serial Data Transport Interface" on page 31 for more information.

IBM IntelliStation Z Pro 6866 System

Table 6 lists the supported slot configuration for NewsCutter Release 3.0 on the IBM IntelliStation Z Pro 6866 system. Slot 1 is dedicated to the AGP board that IBM uses for its systems. Avid removes this board and does not use this slot. Slots 2 to 5 represent the 32-bit bus segment, and slots 6 and 7 represent the 64-bit bus segment.

Table 6 IBM IntelliStation Z Pro Slot Assignments

Slot		Description
1	AGP slot	(Removed) AGP board
2	PCI slot (32-bit bus)	Available slot
3	PCI slot (32-bit bus)	(Option) Fibre Channel board to playback device, Fibre Channel board to Avid Unity system, or second SCSI controller
4	PCI slot (32-bit bus)	Dual-channel SCSI controller
5	PCI slot (32-bit bus)	Meridien digital media I/O board set[a]
6	PCI slot (64-bit bus)[b]	Edit display controller board
7	PCI slot (64-bit bus)[b]	Available slot (media controller cannot be used)

a. The digital media I/O board must be located on the same bus as the Ultra 160 LVD SCSI controller board.
b. If you have installed a PCI board in an IBM IntelliStation Z Pro 6866 64-bit slot, the network driver must be reinstalled.

Avid Installed Boards

The boards described in this section are the boards Avid installs into the Compaq W8000 system converting it into an Avid NewsCutter system.

Edit Display Controller Board

Compaq includes an AGP board with the W8000 system. In most NewsCutter system configurations, the AGP board is not installed in the Compaq W8000 system. NewsCutter is designed to work with the edit display controller board when using a single monitor. The edit display controller board is installed in a PCI slot and is used to connect the User Interface (UI) monitor. You can identify the edit display controller board by an EDC4 labeled on the top of the metal PCI bracket. See "Installing the Edit Display Controller Board" on page 47 and "Installing the Edit Display Controller Board Driver" on page 68 for more information.

The AGP board is used when in a dual-monitor configuration. In a single-monitor configuration, the AGP board must be removed.

Meridien Digital Media Board Set

The Meridien digital media board set is a PCI board and a daughter board that provides an interface to the Meridien I/O box. See "Installing the Meridien Digital Media Board Set" on page 48 for more information.

MPEG Serial Data Transport Interface

Avid is working on an MPEG Serial Data Transport Interface-Contents Package (SDTI-CP) adapter option that would install into a PCI slot in the NewsCutter system. When this option becomes available, an MPEG SDTI-CP selection will appear in the Video Input, Video Output, Record, and Digital Cut tools. The documentation created for this release includes information on an MPEG SDTI-CP selection in the application. The SDTI-CP option is not available for NewsCutter Release 3.0.

Supported Storage Boards

The SCSI LVD controller included on the system board in Compaq W8000 systems can be used to connect media drives. The Compaq W8000 system supports only the LVD drives. Non-LVD drives are not supported.

Avid provides an optional dual-channel Ultra 160 LVD SCSI controller board if additional SCSI ports are needed.

If you connect single-ended, fast-and-wide drives on an LVD SCSI daisy chain, the controller reverts to fast, wide mode and you lose the LVD mode throughput.

There are three types of storage configurations available for your NewsCutter system:

- Ultra 160 LVD SCSI controller board (local storage)
- Fibre Channel controller board (local storage)
- Avid Unity MediaNetwork (shared storage)

As drive size and drive speed improve, different Fibre Channel devices, MediaDrives, and LVD shuttles will be available for use. Contact your Avid Sales and Product information line at 800-949-2843 for more product information.

Ultra 160 LVD SCSI Controller Board

Compaq ships the W8000 system with an Ultra 160 LVD SCSI controller installed on the system board. The Compaq Ultra 160 LVD SCSI controller is qualified to support Avid LVD MediaDrives. The Compaq W8000 system supports only the LVD drives. Non-LVD drives are not supported.

Avid also offers an Ultra 160 LVD SCSI controller board if you want to add a second controller. This *optional* Ultra 160 LVD SCSI controller board offered by Avid includes two SCSI LVD connectors (dual-channels) and supports up to 15 devices per channel. If you already have an Ultra 160 LVD SCSI controller board, you need to upgrade the firmware on that board. See “Upgrading the ATTO Firmware” on page 74.

NewsCutter Release 3.*x* supports the following two types of SCSI storage:

- All rS LVD MediaDrives available in rack and stack enclosures.
- The MediaDock™ LVD storage system.

Avid has qualified the following storage models for this release:

- Avid MediaDrive rS LVD enclosures
- Avid MediaDrive rS 160/LVD enclosures
- Avid MediaDock LVD shuttle packs
- Avid MediaDock 160/LVD shuttle packs

Fibre Channel Controller Board

NewsCutter supports an optional standalone Fibre Channel controller board and a Fibre Channel disk enclosure that contains up to 14 drives.

The following 7.2K rpm and 10K rpm Fibre Channel storage devices are supported in the 14-drive and 10-drive Fibre Channel disk enclosures:

- Shipping Fibre Channel devices for the various sizes of Fibre Channel disk enclosures:
  - MEDIArray™ II XLV series 36 GB 10K rpm 14-drive enclosure
  - MEDIArray II XLV series 73 GB 10K rpm 14-drive enclosure
  - MEDIArray XLV series 73 GB 10K rpm 10-drive enclosure
- Nonshipping Fibre Channel devices for the 10-drive Fibre Channel disk enclosure:
  - MSDE 9 GB 7.2K rpm
  - MEDIArray 18 GB 10K rpm (early versions)
  - MEDIArray 50 GB 7.2K rpm
  - MEDIArray XL series 18 GB 10K rpm
  - MEDIArray XL series 73 GB 10K rpm

Avid Unity MediaNetwork

The Avid Unity MediaNetwork server and storage subsystem use Fibre Channel storage components to provide the shared storage environment for a number of MediaNetwork clients.

The following 7.2K rpm and 10K rpm Fibre Channel storage devices are supported in the 14-drive and 10-drive Fibre Channel disk enclosures:

- Shipping Fibre Channel devices for the various sizes of Fibre Channel disk enclosures:
  - MEDIArray II XLV series 36 GB 10K rpm 14-drive enclosure
  - MEDIArray II XLV series 73 GB 10K rpm 14-drive enclosure
  - MEDIArray XLV series 73 GB 10K rpm 10-drive enclosure
- Nonshipping Fibre Channel devices for the 10-drive Fibre Channel disk enclosure:
  - MSDE 9 GB 7.2K rpm
  - MEDIArray 18 GB 10K rpm (early versions)
  - MEDIArray 50 GB 7.2K rpm
  - MEDIArray XL series 18 GB 10K rpm
  - MEDIArray XL series 73 GB 10K rpm

For more information about Avid Unity MediaNetwork, see the documentation that ships with Avid's Workgroup solutions and Avid Unity MediaNetwork.

Meridien I/O Box Overview

The Meridien I/O box used with the NewsCutter system supports these video and audio I/O boards (see Figure 5). The following sections explain the functions of each board. Detailed information on each connector is provided in the *Avid NewsCutter Setup Guide*.

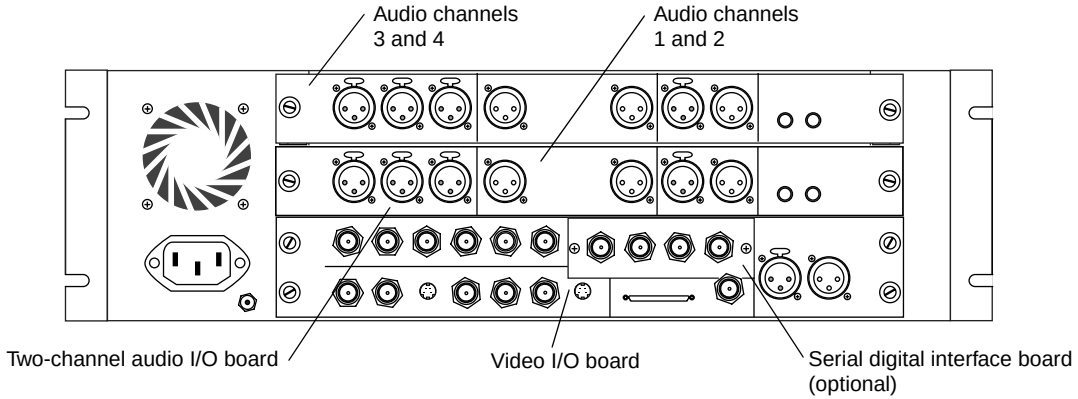

Figure 5 Meridien I/O Box

Two-Channel Audio I/O Board

There are two audio boards used to interface the Compaq W8000 system to speakers and video decks depending upon the type of system you order. Both boards are standalone boards and are not attached to the video I/O board.

A two-channel audio I/O board (see Figure 5) provides connections for two channels of digital audio, two channels of analog audio, and a microphone input.

If you are connecting a microphone, use the MIC connector on the lower two-channel audio I/O board (channels 1 and 2). The MIC connector on the upper two-channel audio I/O board (channels 3 and 4) is disabled.

Video I/O Board

Each system uses a video I/O board. The video I/O board has the following features:

- Provides a parallel digital interface between the digital media board set and the analog I/O.
- Digitizes one channel of composite, component (Y, R-Y, B-Y), or S-Video.
- Converts digital output from the digital media board set to an analog output signal for composite (three outputs), component, and S-Video.
- Acts as a baseboard for the serial digital I/O (SDI) board.
- Provides a genlock capability to allow the video to be locked to an external source such as house sync or to a black burst generator (BBGen).
- Provides an audio slave clock to lock incoming audio to incoming video.

Serial Digital Interface Board — Optional

The *optional* SDI board provides physical inputs and outputs between the video I/O board and a serial digital device. The board also contains the circuitry for the Consumer Source button on the Video Input tool.

Chapter 3

Installing Memory, the Avid Board Set, and the Fan Assembly

Chapter 2 described the Compaq W8000 system and the boards Avid installs into the system. Check the Compaq W8000 system to make sure it functions properly *before* you install memory (if needed), the Avid board set, and the fan assembly.

This chapter contains the following sections:

- Connecting the Basic System
- Checking the System
- Revision Levels
- System Board Slot and Memory Locations
- Rack-Mount Installation
- Installing Avid Boards
- Avid Installed Fan in the Compaq W8000 System

Connecting the Basic System

You need to connect and check the basic system before you place any Avid boards in the system (see Figure 6). This allows you to make sure the system you receive works *prior* to making any changes.

To connect the basic system:

1. Connect the keyboard to the keyboard port at the rear of the Compaq W8000 system.
2. Connect the mouse to the mouse port at the rear of the Compaq W8000 system.
3. Connect a single monitor to connector 1 on the AGP graphics board at the rear of the Compaq W8000 system.
4. Connect the power cable.

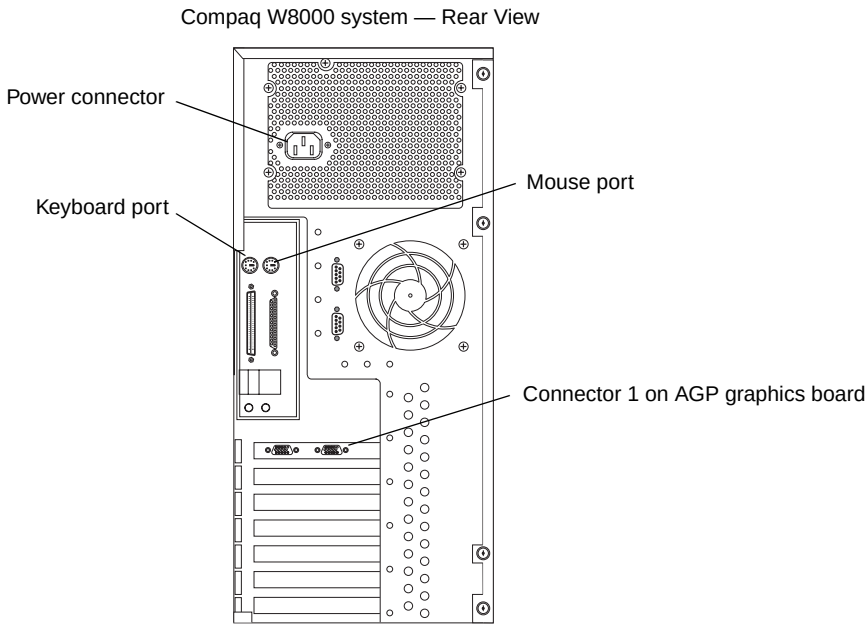

Figure 6 Basic System Connections

Checking the System

You should turn on the system and make sure there are no problems with the basic connections you made in "Connecting the Basic System" on page 38 before you add memory, Avid boards, or make any BIOS or configuration changes to the Compaq W8000 system.

To make sure there are no problems:

1. Turn on the monitor and then the Compaq W8000 system.

When the system boots and displays the Compaq name on the screen, the BIOS revision is displayed in the lower left corner of the screen. Note this for later use. The minimum BIOS level is 1.10.

2. Complete the system build by answering any questions asked by the system during the boot procedure.
3. Log in to the system using the Administrator account with no password.
4. Once you reach the Windows 2000 desktop, you can assume that your Compaq W8000 system is properly connected to the monitor, keyboard, and mouse, and you can continue with the integration.
5. Press Ctrl+Alt+Delete to log out of the system.

   A Windows 2000 Security window opens.
6. Click Shut Down and then select the Shutdown option (*not* the Shutdown and Restart option).
7. Turn off the system when the monitor says it is safe to do so. You now know your system works *before* you start to add boards and make system changes.

Revision Levels

Table 7 shows the minimum driver versions qualified for NewsCutter Release 3.*x* on the Compaq W8000 system.

Instructions for updating the optional Ultra 160 LVD SCSI controller are provided in the "Upgrading the ATTO Firmware" on page 74.

Table 7 Software Revision

Software	Revision
Compaq W8000 system BIOS	686p6 v1.10 minimum, shipping v1.17
Windows 2000 Service Pack	2
(Option) ATTO Ultra 160 LVD SCSI controller board	Driver PC V1.66U
(Option) ATTO Fibre Channel	Driver 2.12a; Firmware 3.03 a3
(Option) Emulex® Fibre Channel	Driver V5.4.52.2; Firmware 3.03 a3

System Board Slot and Memory Locations

The Compaq W8000 system has seven slots; one AGP slot and six PCI slots. Figure 7 shows the slot locations of the Compaq W8000 system as viewed with the left side of the system off. The memory board is above the AGP slot. Other connectors and sections of the system board are shown as a reference.

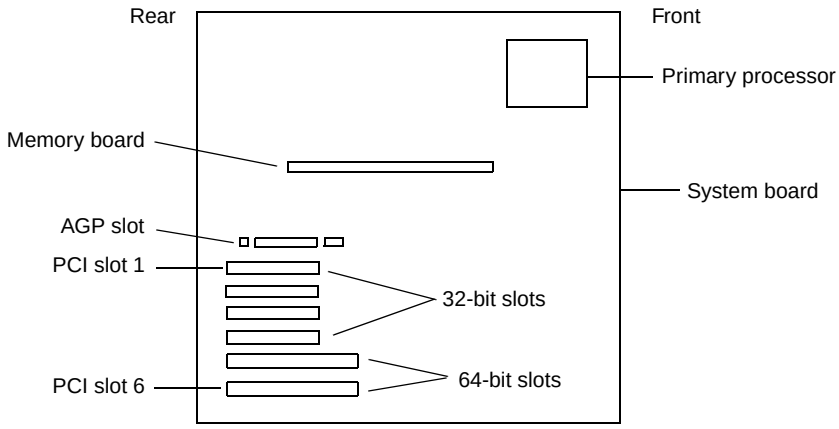

Figure 7 Compaq W8000 System Board

Installing Memory

Avid now ships NewsCutter systems with 512 MB of memory installed, although, NewsCutter Release 3.0 has been qualified to work with 256 MB of memory. If your system requires additional memory, install the memory *before* installing the Avid boards included in your kit. Purchase additional memory through a local source based on the manufacturer's documentation.

See the PDF version of the *Evo W8000 Hardware Reference Guide* for instructions that explain how to open the system and install the memory boards. It is located on the Workstation Reference Library CD that ships with the Compaq W8000 system. You can also find a copy on the Compaq Web site.

The Windows 2000 operating system automatically creates a paging file size that works properly with any Avid application when the system is first built. You only need to change the paging file size if you update the memory size after the Windows 2000 installation. See "Setting the Proper Paging File" on page 66 for more information.

Memory Configurations

The *Evo W8000 Hardware Reference Guide* provides memory configurations that use CRIMM terminators. If you are installing 512 MB of memory using four 128-MB RIMMs, you can use a configuration without CRIMM terminators. Figure 8 shows the layout of the memory board for the Compaq W8000 system.

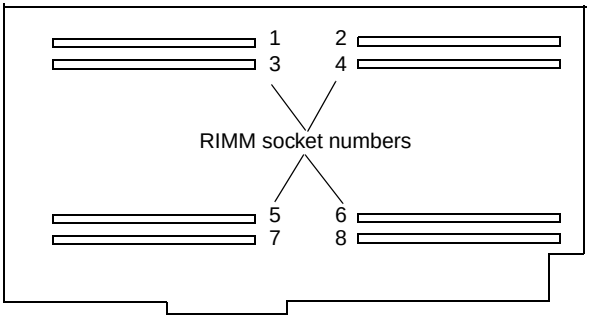

Figure 8 Memory Configuration

To install 512 MB of memory using four 128-MB RIMMs and no CRIMMs:

1. Shut down the operating system.
2. Use the information provided in the *Evo W8000 Hardware Reference Guide* to gain access to the memory board.

If the system has been running, allow sufficient time for the RIMMs to cool down prior to replacing or removing them. RIMM temperatures can reach 212°F (100°C).

Note all CAUTIONs in the *Evo W8000 Hardware Reference Guide* prior to replacing or removing RIMMs.

3. Remove any CRIMM terminators.
4. Place the four 128-MB RIMMs in RIMM sockets 1, 2, 3, and 4, and replace the memory board.

Rack-Mount Installation

If you need to rack mount the Compaq W8000 system, **do it at this time**. Although not explained in this guide, there is a new rack-mount kit available from Avid for the Compaq W8000 system that is a combination of the rack-mount kit from Compaq and a tray provided by Avid. The rack-mount kit requires that you replace the front bezel and floppy drive. Replace these items *before* installing the Avid boards. Installation instructions are included with the kit.

Installing Avid Boards

Instructions on removing the cover and installing expansion boards are given in the manufacturer's documentation.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

Be aware of the following before you start:

- Before removing the cover and installing any boards, make sure the system is working.

If you do not verify that the system is working before you start, and if a problem occurs after the installation, you will not know if your installation caused the problem.

- If you installed additional memory, start the system and check that the system recognizes the additional memory.
- See the *Evo W8000 Hardware Reference Guide* PDF file for instructions that explain how to open the system and install the PCI boards.
- Determine the slot locations of each board you will be installing (see "Slot Assignments" on page 27).
- Install the boards in the lower/inside slots first, and work your way to the upper/outside slots.

- Ensure each board is seated properly in the PCI slot; never force the board into a slot.
- Secure each board to the expansion bulkhead after installation.

Figure 4 on page 28 shows the NewsCutter Release 3.*x* with the Avid boards installed in a Compaq W8000 system. Table 5 on page 29 lists the supported slot configurations for NewsCutter Release 3.*x* on the Compaq W8000 system. Use this information for removing and installing the new boards.

AGP Board

NewsCutter systems shipped on the Compaq W8000 system can easily be configured for a single or a dual monitor. The configurations depend on whether one or two video boards are installed. In earlier releases, NewsCutter systems shipped with one video board installed — the edit display controller (EDC). NewsCutter Release 3.*x* has qualified the accelerated graphics port (AGP) board that Compaq provides, to be used with a second monitor.

The AGP board is included with the system but is not installed in the Compaq W8000 system. If you add or remove the AGP board after installing the NewsCutter application, see "Installing the Edit Display Controller Board" on page 47.

If you reconfigure the system to its original configuration, you can use the AGP board for troubleshooting purposes.

If you plan to use the NewsCutter system in a single-monitor configuration, you *must remove* the AGP board. To add or remove the second video board, see "Installing or Removing the AGP Board" on page 45.

If both the AGP and EDC boards are installed, the Windows operating system uses the video board installed in the AGP slot as the primary video board. When one monitor is used, it must be connected to the EDC board and the AGP board must be removed.

The dual-monitor configuration indicates that the EDC and AGP boards are installed, providing multiple-monitor connections. The Source/Record monitor in the NewsCutter application must be viewed in the Edit monitor connected to the EDC board. The NewsCutter system needs the higher performance of the EDC board to edit and play back the media. All other functions and windows can be moved to the Bin monitor connected to the AGP board.

Position the Edit monitor (connected to the EDC) on the *right* side and the Bin monitor (connected to the AGP) on the *left* side. This is necessary for the NewsCutter application windows to appear and operate properly.

Do not stretch the Timeline across both monitors. Use the Timeline in the Edit monitor (connected to the EDC) only. The speed of the application is greatly reduced if the Timeline is displayed in both monitors.

Installing or Removing the AGP Board

Install the AGP board into the NewsCutter system if you want to use a dual-monitor configuration. *Remove* the AGP board from the NewsCutter system if you do not have two monitors to connect to your system.

The AGP board should be kept accessible to the system for troubleshooting purposes. It should also be configured in the "original" configuration during the boot procedure.

To add or remove the AGP board:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover to the Compaq W8000 system as described in the manufacturer's documentation.
4. Remove the Avid installed fan assembly (see "Removing the Fan" on page 53).

5. Install or remove the AGP board from the AGP slot (see Figure 9). See the manufacturer's documentation for more information on expansion board installations.

   If you are removing the AGP board, unplug the video cable from the AGP board going to the monitor (if not already done).

If you remove the AGP board, install the expansion slot blank panel provided by Avid in the open AGP slot.

6. Replace the Avid installed fan assembly (see "Reinstalling the Fan" on page 54).

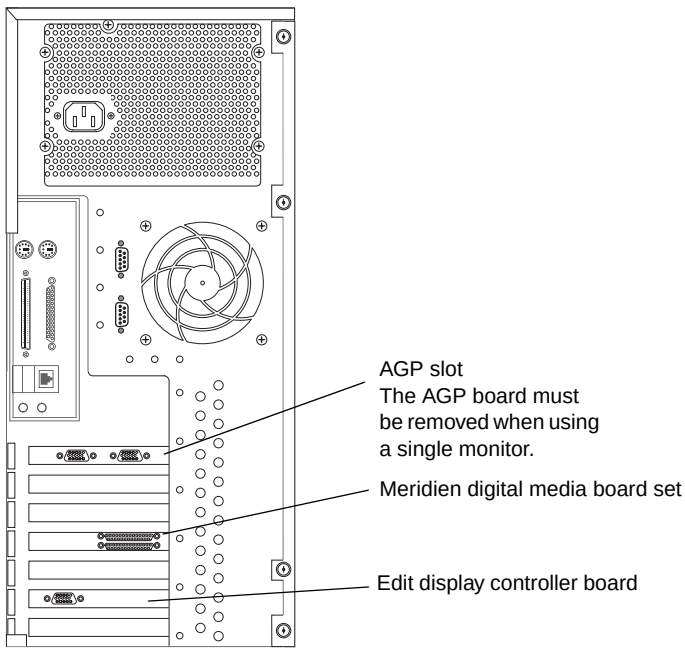

Figure 9 Compaq W8000 System — Rear View

Installing the Edit Display Controller Board

Compaq includes an AGP board with the W8000 system. In most NewsCutter system configurations, the AGP board is not installed in the Compaq W8000 system. The NewsCutter system is designed to work with the edit display controller board.

NewsCutter Release 3.*x* uses the edit display controller board installed in a PCI slot to connect the monitor. Use Table 5 on page 29 to identify the PCI slot where the edit display controller board needs to be installed. Figure 10 shows the edit display controller board.

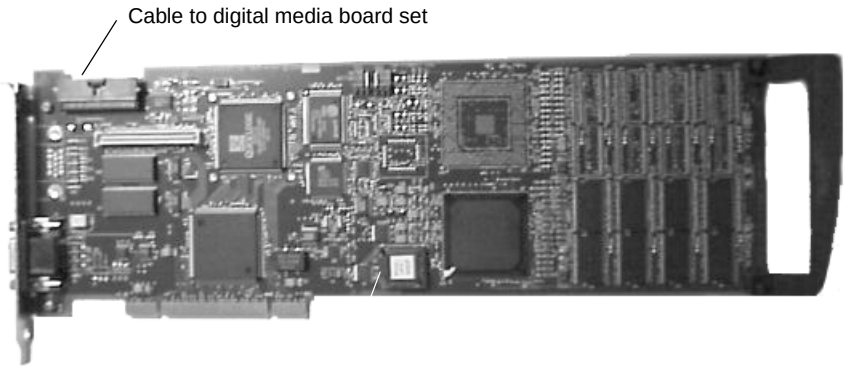

Figure 10 Edit Display Controller Board

To install the edit display controller board:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover according to the manufacturer's documentation (if not already done).

Check that the AGP board is not installed in the system if you are planning to use a single-monitor configuration. See "AGP Board" on page 44 for more information.

4. Install the edit display controller board (see Table 5 on page 29).
5. Secure the edit display controller board to the system.

Use any expansion slot blank panels you remove to cover any open slots not used.

6. Continue with "Installing the Meridien Digital Media Board Set" on page 48.

Installing the Meridien Digital Media Board Set

The Meridien digital media board set is a PCI board and a daughter board that provides an interface to the Meridien I/O box. Use Table 5 on page 29 to identify the PCI slot where the Meridien digital media board set needs to be installed.

Before installing the Meridien digital media board set in the system, make sure the daughter board's connector and standoffs are securely fastened to the board (see Figure 11) using a connector and standoffs.

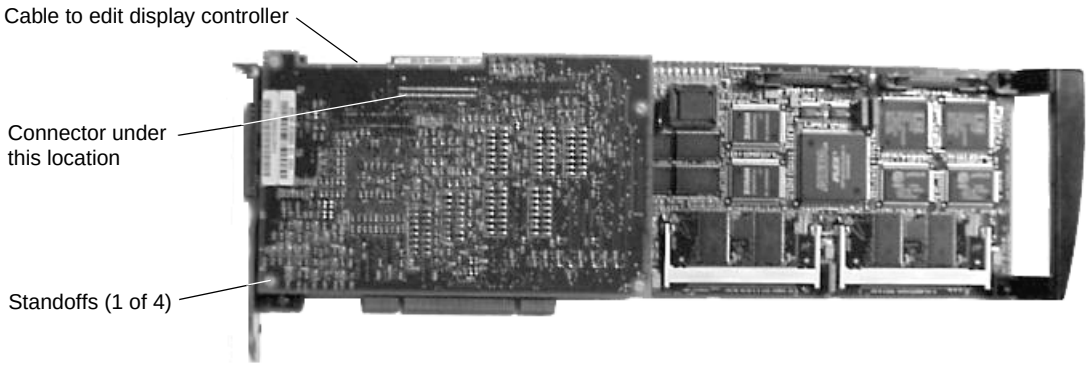

Figure 11 Meridien Digital Media Board Set

To install the Meridien digital media board set:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover according to the manufacturer's documentation (if not already done).
4. Install the Meridien digital media board set (see Table 5 on page 29).
5. Secure the Meridien digital media board set to the system.

Use any expansion slot blank panels you remove to cover any open slots not used.

6. Attach one end of the cable to the edit display controller cable header and the other end to the Meridien digital media board set cable header. Align the cable in the connectors; each end of the cable is keyed for proper installation.

Make sure the cable is firmly seated in the connector without forcing an improper connection.

7. Continue with "Installing Optional Boards" on page 49. If you have no optional boards to install, continue with "Reinstalling the Fan" on page 54.

Installing Optional Boards

Optional boards you have purchased can now be installed. Optional boards include:

- Ultra 160 LVD SCSI controller board
- Fibre Channel board playback device

The Compaq W8000 system has a built-in MIDI controller.

If you are installing the *optional* DV Serial Data Transport Interface (SDTI) adapter board, see the *Avid NewsCutter SDTI Option Installation Instructions* that come with the board.

Use Table 5 on page 29 to identify the PCI slot to install your optional boards.

Ultra 160 LVD SCSI Controller Board

The ATTO Technology ExpressPCI Ultra 160 LVD is a dual-channel Ultra3 SCSI controller board (see Figure 12) that supports LVD SCSI devices and is used to connect the media drives. Although the onboard SCSI controller in the Compaq W8000 system meets all the NewsCutter system requirements, this board is offered as an option for adding additional SCSI buses to your system.

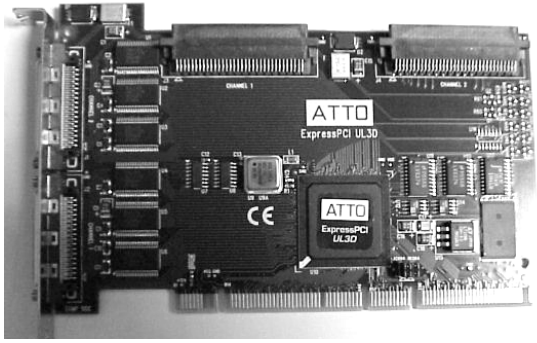

Figure 12 Ultra 160 LVD SCSI Controller Board

Use Table 5 on page 29 to identify the PCI slot to install your optional boards.

To install the Ultra 160 LVD SCSI controller board:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover according to the manufacturer's documentation (if not already done).
4. Install the Ultra 160 LVD SCSI controller board (see Table 5 on page 29).
5. Secure the Ultra 160 LVD SCSI controller board to the system.

ATTO 3300 Fibre Channel Controller Board

The ATTO 3300 Fibre Channel controller board is a 2-Gb optical controller used for standalone Fibre Channel storage (see Figure 13). This is also the required controller to support the Avid Unity MediaNetwork storage environment.

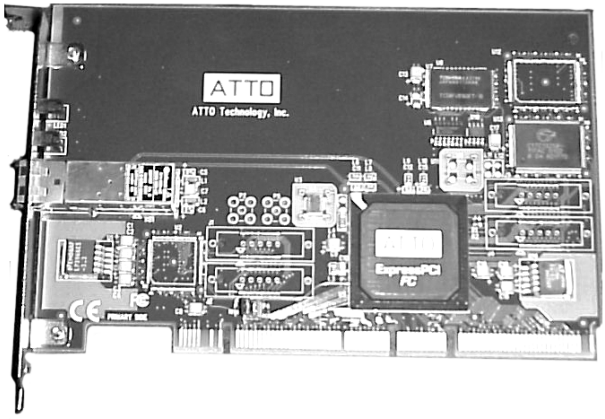

Figure 13 ATTO 3300 Fibre Channel Controller Board

Use Table 5 on page 29 to identify the PCI slot to install your optional boards.

To install an optional board:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover according to the manufacturer's documentation (if not already done).
4. Install the optional board in the recommended PCI slot (see Table 5 on page 29).
5. Secure the optional board to the system.

Emulex LP850 Fibre Channel Controller Board

Avid no longer ships this board.

The Emulex LightPulse™ LP850 Fibre Channel controller board is supported for standalone Fibre Channel storage (see Figure 14). This controller board is also supported in the Avid Unity MediaNetwork work storage environment. This controller is a 64-bit capable board, but is used in 32-bit mode.

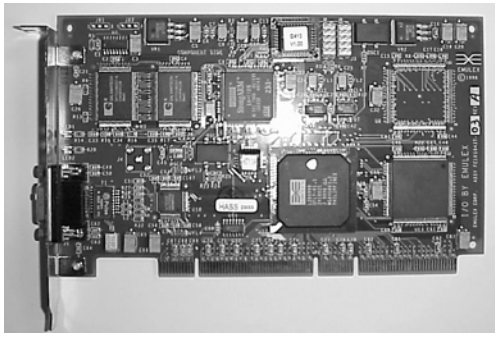

Figure 14 Emulex LP850 Fibre Channel Controller Board

Use Table 5 on page 29 to identify the PCI slot to install your optional boards.

To install an optional board:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Remove the cover according to the manufacturer's documentation (if not already done).
4. Install the optional board in the recommended PCI slot (see Table 5 on page 29).
5. Secure the optional board to the system.

Avid Installed Fan in the Compaq W8000 System

The documentation that ships with the Compaq W8000 system explains how to install optional equipment. However, Avid requires an extra fan in the Compaq W8000 system for cooling the Avid board set. The following sections describe how to remove and reinstall the fan that Avid has added to the Compaq W8000 system.

Removing the Fan

To remove the fan:

1. Turn off the system and unplug the power cord.
2. Put on an antistatic wrist strap and connect it to a metal ground point on your system.

To avoid static damage to your circuit board, take the proper antistatic precautions *before* handling the board.

3. Lay the system on its right side and remove the left side cover according to the manufacturer's documentation.
4. Unplug the fan (see Figure 15).

Avid uses one of the power connectors available for internal disk drives.

5. Lift the fan from the system.

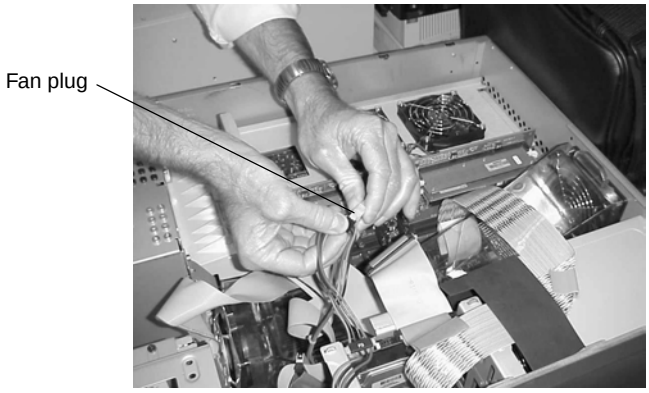

Figure 15 Unplugging the Fan

Reinstalling the Fan

To reinstall the fan:

1. Place the two fan tabs, located at the rear of the fan, into the lowest holes of the rear airflow grate (see Figure 16).

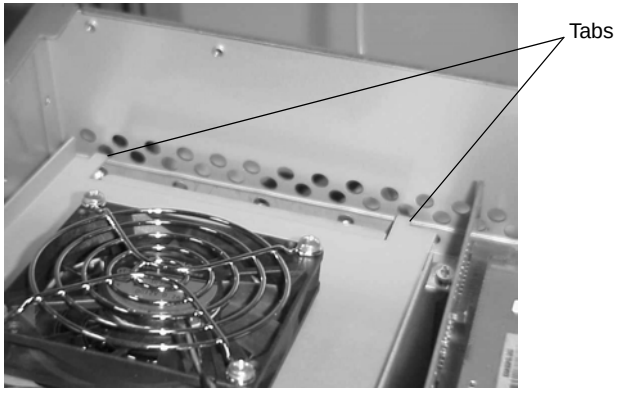

Figure 16 Fan Tab Location

2. Gently lower the fan portion of the assembly onto the board set (see Figure 17).

Figure 17 Lowering the Fan

3. Plug the power connector into one of the available internal disk drive power connectors in the system (see Figure 18).

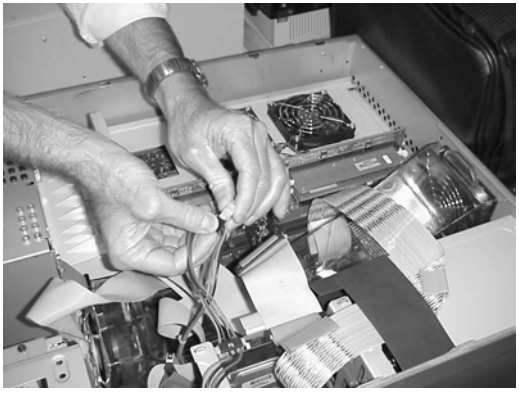

Figure 18 Connecting the Fan Power

4. Replace the side cover.

The side cover holds the fan in position. If you install the fan and attempt to place the system upright without its side cover, the fan will fall out.

Chapter 4

Changing System BIOS and Creating a Windows 2000 Image

Once you know the system is working as shipped, and you have added the memory, the Avid boards, and the fan kit, you might need to set some specific system settings.

This chapter explains how to update the system BIOS, use the Avid Product Recovery CD-ROM to install the Windows 2000 image on the system disk, change the system BIOS settings, and set a paging file.

This chapter contains the following sections:

- Checking the Revision of the System BIOS
- Avid Product Recovery CD-ROM Overview
- Using the Avid Product Recovery CD-ROM
- Changing the System BIOS Settings
- Changing the Power Management Settings
- Setting the Proper Paging File

Checking the Revision of the System BIOS

The minimum system BIOS revision is 1.10. Unless you receive specific instructions, you do not need to back-rev the BIOS to revision 1.10. If you do not know what the revision of the system BIOS is, see "Checking the System" on page 39.

Updating Your System BIOS

You should follow the instructions in this section only if you have determined you need to update your BIOS.

The Compaq Web site provides detailed instructions on how to download the BIOS and install it on your system. You should be able to download the BIOS and install it on your system if you need it.

To update your system BIOS you need to:

- Have a formatted floppy disk.
- Go to the Compaq Web site, www.compaq.com.
- Download the latest updated BIOS to your system.
- Install the BIOS on the formatted floppy disk.
- Install the new BIOS on your system using the floppy disk.

While the BIOS is being installed, do not reboot or turn off the system.

Avid Product Recovery CD-ROM Overview

The Avid Product Recovery CD-ROM contains an image of the Windows 2000 operating system with the drivers needed by the Avid software application already installed. The Avid Product Recovery CD-ROM re-creates the Windows 2000 operating system on one partition the size of your system disk.

The Avid Product Recovery CD-ROM was created by Avid and does not contain the same information as the recovery CD-ROM supplied by Compaq.

To be sure your system is capable of using the Avid Product Recovery CD-ROM, look on the left side panel of the system and locate the Windows 2000 Microsoft 25-digit Product Key. You will need it the first time you boot the system.

The Avid Product Recovery CD-ROM is bootable and installs:

- A Windows 2000 image that includes configuration changes to Windows 2000 settings made by Avid.
- The drivers needed by the Avid application software.

The Avid Product Recovery CD-ROM installs the proper drivers to the disk for all the shipping Avid boards. However, unless the boards for the drivers are physically in the system the first time the system is booted after *the Avid Product Recovery CD-ROM is inserted, the drivers will* not *automatically be installed by the operating system.*

Using the Avid Product Recovery CD-ROM

This section explains how to use the Avid Product Recovery CD-ROM to install the Windows 2000 operating system and the needed Avid drivers on your Compaq W8000 system.

You should always *read the appropriate release notes before you use the Avid Product Recovery CD-ROM. You might need to perform functions not explained in this guide.*

This document and the Avid Product Recovery CD-ROM are for use only with the Compaq W8000 system and a Windows 2000 operating system.

You should disconnect all external drives from the system prior to continuing with this procedure so you do not lose data. You should only have the original internal drives connected.

Installation Options

When you use the Avid Product Recovery CD-ROM you will have two options:

1. Perform an Avid Windows 2000 Setup or Product Recovery for the Compaq W8000.

This option formats the entire disk drive, and places the Windows 2000 operating system and the drivers for the Avid application software on a 40-GB NTFS partition.

2. Exit Avid System Recovery tool without doing any recovery.

Installation Considerations

The following should be taken into consideration *before* you use the Avid Product Recovery CD-ROM:

- If you select 1, the entire contents of the C partition will be destroyed and one large partition will be created.
- All Avid boards, storage boards, and AGP board should be installed *before* you use the Avid Product Recovery CD-ROM.
- If needed, you should back up the data on the system disk prior to using the Avid Product Recovery CD-ROM.

Data being overwritten includes registry information that describes your disk configuration. You might need to perform a rescan or import foreign disks to reattach external disks.

Installing Windows 2000 from the Avid Product Recovery CD-ROM

It is important you read this section completely prior to installing the system.

You will be warned two times during the following procedure that you are about to destroy the data on all or parts of your system drive.

To install the Windows 2000 operating system:

1. If you haven't already done so:
   - Turn off the system.
   - Turn off all external drives.
2. Turn on the system and then quickly place the Avid Product Recovery CD-ROM into the CD-ROM drive.

   The system finds the disk controllers and internal drives, and then boots from the CD-ROM. A startup utility appears.
3. Select number 1 (if you select 2 you abort the installation):
   - 1 — Perform an Avid Windows 2000 Setup or Product Recovery for the Compaq W8000.
   - 2 — Exit Avid System Recovery tool without doing any recovery.

   Press Enter.
4. A message appears, asking you to make sure you have the Microsoft Product Key that contains the 25-digit product code (see "Avid Product Recovery CD-ROM Overview" on page 58).

   If you find the Product Key, press any character on the keyboard.
5. Read the first warning that appears, telling you that you are about to destroy data on your disk. If you want to continue, then press Y (no need to press Enter).
6. Read the second warning that appears, telling you that you are about to destroy data on your disk. If you want to continue, then press Y (no need to press Enter).

   A Symantec® Ghost® window opens, and the selected installation starts. As the installation progresses, the completion percentage is displayed in the window. The installation should take from 3 to 6 minutes.

7. A screen appears asking you to remove the Avid Product Recovery CD-ROM and press Ctrl+Alt+Delete.

   Remove the CD-ROM.

   There is also a message that says “Hit any key to continue.” If you “hit” any key you are placed back to the same screen. This action forces you to take out the Avid Product Recovery CD-ROM and press Ctrl+Alt+Delete before continuing.

8. Turn off the system.
9. Turn on the external drives.

Booting the Windows 2000 Operating System

To boot the Windows 2000 operating system:

1. Turn on the system.
2. As the system boots, you will be asked questions about the system. Follow the instructions on the screen and provide information to complete the installation, such as:
   - Regional settings.
   - Name and organization.
   - Product Key (25-digit code on the Microsoft Product Key; see “Checking the Revision of the System BIOS” on page 58).
   - Computer name (do not enter a password for the administrator account).
   - Date and time.
   - Networking setup for your particular site. You need network administrative privileges if you add the system to the network.
3. If you are connected to a network, complete the Network Identification Wizard.

   The setup is complete.

New Hardware Wizard

The first time you log in to the system after using the Avid Product Recovery CD-ROM, you might see a Welcome to Found New Hardware Wizard (depending on the hardware configuration).

If you see a Welcome to Found New Hardware Wizard, use the following procedure to step through the wizard and disable the hardware. The Windows 2000 operating system found the Avid boards and cannot find a driver for them. You need to disable the hardware to stop the wizard from appearing each time you boot the system.

To disable the hardware for the wizard:

1. Click Next in the Welcome to Found New Hardware Wizard.

   The Install Hardware Devices Driver window opens.

2. Select “Search for a suitable driver for my device,” and then click Next.

   The Locate Driver Files dialog box appears.

3. Click Next.

   The Driver Files Search Results window opens.

4. Select “Disable the device,” and then click Finish.

5. Repeat, if necessary, for each Avid board.

If the Windows 2000 system finds stripe sets and asks if you want to reformat them because they don’t have the correct signature, DO NOT REFORMAT. Let them exist as they are for now.

Changing the System BIOS Settings

This section explains how to change the system BIOS settings for the Compaq W8000 system for use with the Avid software applications if needed. You should note the following information concerning the system BIOS:

- When the system boots and displays the Compaq name to the screen, the BIOS revision is displayed in the lower left corner of the screen. As explained in Table 7 on page 40, the minimum revision of the system BIOS is 686p6 v1.10.
- Replacing a PCI board in the system might cause the BIOS to return to the default state. You should check and change the system BIOS if necessary each time you add or replace a PCI board.
- At this time you only need to change the Power Management settings in the system BIOS (see "Changing the Power Management Settings" on page 65).

After you install a newer revision of the system BIOS, you must also change the Power Management settings. See "Changing the Power Management Settings" on page 65.

- The default BIOS settings force the system to boot from devices in the following order, and does not need to be changed:
  a. IDE CD-ROM drive
  b. Diskette drive
  c. IDE system drive
- You would normally press F10 when the Compaq message appears on the screen. However, the processor speed might cause the F10 message to go by very quickly or not at all. You should start pressing F10 right after you turn on the system.
- Once you enter the system BIOS you use the arrow keys to move the pointer.

Changing the Power Management Settings

The BIOS settings for Power Management *must* be disabled to allow the system Power switch to act as a system Power switch. If Power Management is enabled, the Power switch will act like a Reset switch and can cause problems.

To disable Power Management:

1. If your system is not already turned off, then turn off the system in the normal manner (do not restart).
2. Turn on the system and press F10 (Setup) to place the system into the BIOS.

   The system enters the BIOS after the SCSI utility has completed.
3. When the language selection appears, select English and then press Enter.

   You are placed in the Main menu.
4. Use the arrow keys to move to Power, select Energy Saver, and then press Enter.
5. Use the arrow keys to select Disable, and then press F10 to accept.

   You are placed in the Main menu.
6. Use the arrow keys to move to the File menu, choose Save Changes and Exit, and then press Enter.
7. Press F10 to Save Changes and Exit.

   The system reboots and the Power Management feature is disabled.

Setting the Proper Paging File

The Windows 2000 operating system creates the proper paging file (1.5 x memory size) when it is booted for the first time. This includes the first boot after you install the system using the Avid Product Recovery CD-ROM. However, if you add more memory *after* the Windows 2000 operating system is booted for the first time, you need to change the paging file.

The paging file should be at least 1.5 x memory size. The following procedure is supplied in case you ever need to change the paging file.

To change the paging file size according to the memory size:

1. Log in as System Administrator to your local computer.
2. Click the Start button, point to Settings, and then select Control Panel.

   The Control Panel window opens.
3. Double-click the System icon.
4. Click the Advance tab.
5. Click Performance Options.

   The Performance Options dialog box appears.
6. Click Change in the Virtual Memory area.

   The Virtual Memory dialog box appears.
7. Select the appropriate partition in the Drive list.
8. Change the initial and maximum paging file size under the selected disk partition.

The minimum and maximum paging file should be the same size.

9. Click Set.
10. Click OK to close all open dialog boxes and windows.
11. Restart the system to allow the paging file to take effect.

Chapter 5

Installing and Verifying Avid System Software

Chapter 3 described the installation of the Avid board set. Use the *Avid NewsCutter Release Notes* to install the NewsCutter application software. This chapter provides information on verifying and installing additional drivers.

This chapter contains the following sections:

- Installing the Avid System Software
- Installing Optional Disk Controller Drivers
- Verifying That the Application Drivers Have Started
- USB-to-MIDI Software Installation
- Antivirus Applications
- Uninstalling the Avid Application

Installing the Avid System Software

Use the *Avid NewsCutter Release Notes* to install the Avid NewsCutter application software. During the installation, the drivers needed for the Avid boards are installed with the NewsCutter application software. Note the recommendations that suggest:

It is very important you use the release notes and the CD-ROM that ships with your specific system to install the Avid system software. The release notes tell you how to install the Avid system software, and also explain any last-minute details relating to problems or new procedures you must follow during the installation of the Avid system software.

Installing the Edit Display Controller Board Driver

If you purchased your Avid system as a new system, the driver is already installed. You need to install the edit display controller board driver only if you are upgrading.

The edit display controller board driver is included with the NewsCutter Release 3.*x* software. You *must* apply this driver if you are upgrading your NewsCutter software to this release. After installing NewsCutter Release 3.*x* software, install the Avid display controller Number Nine® driver from the Display Properties window, and then reboot the system when instructed.

Although the edit display controller board was assigned a driver during the Windows 2000 installation, you must install the Avid-specific edit display controller driver (EDC). When instructed during the procedure, restart the system so the drivers are installed by the operating system.

Avid has shipped different types of edit display controllers that use one of two display drivers:

- EDC3 driver (older version, not used)
- EDC4 driver

To install the Avid edit display controller driver:

1. Insert the Avid application CD-ROM into the CD-ROM drive.
2. Right-click the My Computer icon and select Manage.

   The Computer Management window opens.
3. Click Device Manager.
4. Expand the Display Adapters section by clicking the + (plus) sign.
5. Double-click one of the Number Nine Visual Technologies Revolution 3D devices (note that Technologies is plural; it changes to Technology after you install the Avid driver).

   A dialog box appears.
6. Click the Driver tab.
7. Click the Update Driver button.

   The Update Device Driver Wizard appears.
8. Click Next.

   A dialog box appears.
9. Select "Display a list of known drivers for this device so I can choose a specific driver," and then click Next.

   A dialog box appears.
10. Click the Have Disk button.

    A dialog box appears.
11. Click the Browse button and browse to:

    My Computer*CD-ROM drive letter*\Upgradedrivers \Displaydrivers
12. Select Rev4(.inf) and then click Open.
13. Click OK.
14. Under models, select Number Nine Visual Technology Revolution, and then click Next.

    The Update Driver Warning dialog box appears.
15. Click Yes.

16. Click Next.

    The Digital Signature Not Found dialog box appears.

17. Click Yes.
18. Click Finish.
19. Click Close.
20. Click Yes to restart the system.
21. When the system reboots and you log in, set your new screen resolutions.

Setting Your Screen Resolution

The following procedure explains how to change the screen resolution. Avid has qualified the resolutions listed in Table 8 and a Refresh Frequency of 75 Hz.

To set the display properties for two monitors:

1. Right-click the desktop and select Properties.

   The Display Properties dialog box appears.

2. Click the Settings tab and do one of the following:

   - If you are using a two-monitor system, two numbers (1 and 2) will appear representing two monitors. Go to step 3.
   - If you are using a single-monitor system, you will not see the two numbers. Go to step 4.

3. Click 1.

4. In the Screen area, click the slider and drag it to one of the qualified resolutions (see Table 8). The typical resolution is 1024 x 768 pixels.

Table 8 Monitor Resolutions

One Monitor	Two Monitors
1024 x 768 pixels	2048 x 768 pixels
1152 x 864 pixels	2304 x 864 pixels
1280 x 1024 pixels	2560 x 1024 pixels

5. Under Colors, select True Color (32 bit):
   a. Click Apply.
   b. Click OK.
   c. Click Yes.
6. Click the Advanced button.
7. Click the Monitor tab.
8. Choose 75 Hertz from the Refresh Frequency pop-up menu.
   a. Click OK.
   b. Click OK.
   c. Click Yes.
9. (Option for dual monitors) Click the #2 monitor to activate the second monitor.
10. (Option for dual monitors) Select “Extend my Windows desktop onto this monitor,” and then click Apply.
11. (Option for dual monitors) Repeat steps 4 to 8.
12. Click OK to close the Display Properties dialog box.

Installing Optional Disk Controller Drivers

The Avid Product Recovery CD-ROM installs the device drivers needed for the Avid supported disk controllers. If for any reason the drivers are not installed properly, this section explains how to install the drivers from the Avid application CD-ROM.

Install or check the device drivers for all installed disk controllers. The drivers were shipped on the Avid application CD-ROM and on a floppy disk with each controller ordered. You can use the driver on the Avid application CD-ROM or the floppy disk. The example uses the Avid application CD-ROM instead of the driver located on a Windows 2000 CD-ROM. The installation procedures are for the following disk controllers:

- ATTO Technology ExpressPCI Ultra 160 LVD dual-channel — Express driver
- ATTO Technology Express Fibre Channel driver - Expressfc
- Emulex LP850 Fibre Channel — LP6NDS35 driver

Avid no longer ships the Emulex LP850 Fibre Channel controller. However, the information has been left in this revision of the guide for this release.

During its first boot, the Windows 2000 operating system finds the ATTO SCSI, ATTO Fibre Channel, and Emulex controller board hardware (disk hardware), but no drivers are found for the disk hardware. This causes the Windows 2000 operating system to place the disk hardware in the Other Devices category. The following list gives you an overview of where drivers are located and general information about them.

- The ATTO SCSI driver, ATTO Express PCI, is located on the Avid application CD-ROM.
- The ATTO Fibre Channel driver, ATTO Expressfc, is located on the Avid application CD-ROM or a floppy disk.
- The Fibre Channel driver, Emulex 6000/7000/8000/9000 PCI Fibre Channel, is located on the Avid application CD-ROM.

- Since the SCSI controller is dual channel, you need to install the SCSI driver twice, once for each channel.
- The SCSI driver asks you to restart after you install it, but the Emulex Fibre Channel driver doesn't.

Installing the ATTO Express PCI Driver

To install the ATTO Express PCI driver for the Ultra 160 LVD SCSI controller board:

1. Right-click the My Computer icon and select Manage.

   The Computer Management window opens.

2. Click Device Manager.
3. Expand the Other Devices section by clicking the + (plus) sign.

   A SCSI controller is displayed twice, once for each channel of the dual-channel SCSI controller.

4. Right-click one channel of the device shown, and select Properties.

   The SCSI Controller Properties window opens.

5. Click the Driver tab.
6. Click the Update Driver button.

   The Update Device Driver Wizard appears.

7. Click Next.

   A dialog box appears.

8. Select "Search for a suitable driver for my device," and then click Next.

   A dialog box appears.

9. Insert the Avid application CD-ROM into the CD-ROM drive.
10. Select "Specify a location," and then click Next.

    A dialog box appears.

11. Click the Browse button and browse to:

    My Computer*CD-ROM drive letter*\Upgradedrivers \ATTO SCSI Drivers

12. Select Express.inf, and then click Open.
13. Click OK in the Update Device Driver Wizard.
14. Click Next.

    The Digital Signature Not Found dialog box appears.

15. Click Yes.

    The software installs (which might take a minute).

16. Click Finish, and then close the Express PCI Adapter window (do not restart).
17. Repeat steps 4 to 16 for the other SCSI channel.
18. After you install the drivers for both channels, remove the Avid application CD-ROM from the CD-ROM drive, and then restart the system.

Upgrading the ATTO Firmware

If you are upgrading from an earlier release and have an Ultra 160 LVD ATTO SCSI controller board installed in your system, you must update the firmware (Flash and NVRAM) *before* using this Avid release. Avid ships the required updated firmware on the Avid NewsCutter Release 3.0 installer CD-ROM. The upgrade can only be performed using a firmware floppy disk.

When the Ultra 160 LVD ATTO SCSI controller board is purchased separately, the firmware is included on a floppy disk as part of the installation kit.

To create the firmware floppy disk:

1. Insert a blank, formatted floppy disk into the floppy drive.
2. Copy the DOS folder from one of the following locations:
   - If you *have not* installed the Avid application, copy the DOS folder from:

     CD-ROM:\UpgradeDriver\ATTOSCSI\DOS
   - If you *have* installed the Avid application, you can also copy the DOS folder from the application's Utilities folder. The default location is:

     C:\Program Files\Avid\Utilities\ATTOSCSI\DOS

You must copy the DOS folder and its contents to the floppy disk. Do not copy just the files inside the folder.

3. Remove the ATTO floppy disk from the floppy drive.

To upgrade the ATTO firmware using the nonbootable floppy disk:

1. Restart the system.
2. Press Ctrl+Z when the ATTO banner appears on the screen asking if you want to enter the Setup utility.

   The Main menu appears on the screen.
3. Use the arrow keys to select number 1, Adapters Menu, and then press Enter.

   The Adapters menu appears on the screen.
4. Use the arrow keys to select number 4, Update Flash ROM, and then press Enter.
5. Insert the ATTO floppy disk into the floppy drive, and then press Enter.

   The Flash Update File list appears on the screen showing the files that will be updated.
6. Press Enter to start the Flash update.

Do not reboot the system during the Flash update.

7. When the Flash update is complete, you might see the following message:

   ```
   RAID has been enabled for your adapter(s).
   Remember to Save Parameters when you exit.
   ```

   Press Enter. The message disappears and you are returned to the Adapters menu.

8. Press the Esc key.

   The Adapters menu disappears and you are returned to the Main menu.

9. Remove the floppy disk from the floppy drive.

10. Use the arrow keys to select Save Parameters and Exit, and then press Enter.

    The changes are saved and the system automatically restarts.

Installing the ATTO Fibre Channel Driver

If you are using the ATTO Fibre Channel controller as standalone disk storage, use the instructions in this document to install the Fibre Channel driver. The Fibre Channel drives should be attached and turned on before you install the driver. If you are using a Fibre Channel controller in conjunction with Avid Unity MediaNetwork, do not *use the instructions in this document to install the Fibre Channel driver. See the instructions in the* Avid Unity MediaNet Windows Client Setup Guide *to install the new driver.*

To install the ATTO 3300 Fibre Channel driver:

1. Right-click the My Computer icon and select Manage.

   The Computer Management window opens.

2. Click Device Manager.

3. Expand the Other Devices section by clicking the + (plus) sign.

   A type of Fibre Channel controller is displayed.

4. Right-click the Fibre Channel controller, and select Properties.

   The Fibre Channel Controller Properties window opens.

5. Click the Driver tab.
6. Click the Update Driver button.

   The Update Device Driver Wizard appears.
7. Click Next.

   A dialog box appears.
8. Select “Search for a suitable driver for my device,” and then click Next.

   A dialog box appears.
9. Insert the Avid application CD-ROM into the CD-ROM drive.
10. Select “Specify a location,” and then click Next.

    A dialog box appears.
11. Click the Browse button and browse to:

    My Computer*CD-ROM drive letter*\Upgradedrivers \ATTO Fibre Channel \Win2K
12. Select Expressfc.inf, and then click Open.
13. Click OK in the Update Device Driver Wizard.
14. Click Next.

    The Digital Signature Not Found dialog box appears.
15. Click Yes.

    The software installs (which might take a minute).
16. Click Finish, and then close the Express Adapter window.
17. After you install the drivers for the ATTO controller, remove the Avid application CD-ROM from the CD-ROM drive, and then restart the system.

Installing the Emulex Fibre Channel Driver

If you are using a Fibre Channel controller as standalone disk storage, use the instructions in this document to install the Fibre Channel driver. If you are using a Fibre Channel controller in conjunction with Avid Unity MediaNetwork, do not *use the instructions in this document to install the Fibre Channel driver. See the instructions in the* Avid Unity MediaNet Windows Client Setup Guide *to install the new driver. The Fibre Channel drives should be attached and turned on before you install the Emulex driver.*

To install the Fibre Channel driver, Emulex 6000/7000/8000/9000 PCI Fibre Channel:

1. Right-click the My Computer icon and select Manage.

   The Computer Management window opens.

2. Click Device Manager.
3. Expand the Other Devices section by clicking the + (plus) sign.

   A type of Fibre Channel controller is displayed.

4. Right-click the Fibre Channel controller and select Properties.

   The Fibre Channel Controller Properties window opens.

5. Click the Driver tab.
6. Click the Update Driver button.

   The Update Device Driver Wizard appears.

7. Click Next.

   A dialog box appears.

8. Select “Search for a suitable driver for my device,” and then click Next.

   A dialog box appears.

9. Insert the Avid application CD-ROM into the CD-ROM drive.
10. Select “Specify a location,” and then click Next.

    A dialog box appears.

11. Click the Browse button and browse to:

    My Computer*CD-ROM drive letter*\Upgradedrivers
    \Emulex Fibre Channel Driver

12. Select OEMSETUP.inf, and then click Open.
13. Click OK in the Update Device Driver Wizard.
14. Click Next.

    The Digital Signature Not Found dialog box appears.

15. Click Yes.

    The software installs (which might take a minute).

16. Click Finish, and then close the Emulex Properties window.
17. You might see a Welcome to Found New Hardware Wizard (depending upon the hardware configuration) or a dialog box stating the system is installing a utility. If not, continue to step 18.

    Use the following procedure to step through the wizard and disable the hardware. The utility is not needed and this stops the wizard from appearing each time you boot the system.

    To disable the hardware for the wizard:

    a. Click Next in the Welcome to Found New Hardware Wizard.

       The Install Hardware Devices Driver window opens.

    b. Select “Search for a suitable driver for my device,” and then click Next.

       The Locate Driver Files dialog box appears.

    c. Click Next.

       The Driver Files Search Results window opens.

    d. Select “Disable the device,” and then click Finish.

18. After you install the drivers for the Emulex controller, remove the Avid application CD-ROM from the CD-ROM drive, and then restart the system.

Verifying That the Application Drivers Have Started

You can verify that the following drivers are installed properly:

- Meridien digital media board device driver — APMPhxNTDriver
- EditDMA device driver — APMEditDMA
- Sentinel™ device driver — Sentinel

To check the status of the driver:

1. Right-click the My Computer icon and select Manage.

   The Computer Management window opens.

2. Expand the System Information section by clicking the + (plus) sign.
3. Expand the Software Environment section by clicking the + (plus) sign.
4. Click the Drivers folder.

   The Name, Description, Type, State, and Status of the drivers on the system are displayed in the right panel of the Computer Management window.

5. Looking under the Description section, search for the needed Avid drivers and make sure the State is Running and that the Status is OK:

   - APMEditDMA
   - APMPhxNTDriver
   - Sentinel (dongle driver)

6. Click the Device Manager section.
7. Expand the Display Adapters section by clicking the + (plus) sign.
8. Make sure the display driver “Number Nine Visual Technology Revolution 4,” is listed for the EDC4 display controller. If this driver says Technologies it is the incorrect driver. See “Installing the Edit Display Controller Board Driver” on page 68 to install the proper driver.

USB-to-MIDI Software Installation

There is no MIDI connection at the rear of the Compaq W8000 system. The *Avid NewsCutter Setup Guide* shows how to connect the USB-to-MIDI converter to the B input and B output of the MIDIMAN MIDISPORT™ 2x2. The software by default points to the A input and A output connections.

The following information explains how to install the USB-to-MIDI software on the Compaq W8000 system, test the connections (after the Avid application is installed), and change the Avid application to match the A or B connection of the MIDIMAN MIDISPORT 2x2.

Since the Avid application is normally not installed when you ship the system to the customer, this information is also available in the release notes for the customers.

The *Avid NewsCutter Setup Guide* describes how to connect a fader controller to your Avid system. This section describes how to complete the connection by installing USB-to-MIDI software and configuring the software to recognize your fader controller.

The term fader controller applies to the following controllers:

- *JL Cooper FaderMaster Pro™ MIDI automation controller*
- *JL Cooper MCS-3000X MIDI automation controller*
- *Yamaha® 01V digital mixing console*

Avid only supports the MIDIMAN MIDISPORT 2x2 USB-to-MIDI converter.

To reduce traffic on the USB bus, connect the USB-to-MIDI converter only if you need to use the JL Cooper FaderMaster Pro, JL Cooper MCS-3000X, or Yamaha 01V fader box.

Installing the MIDISPORT 2x2 Drivers

To install the MIDISPORT 2x2 drivers:

1. Ensure the MIDISPORT 2x2 USB-to-MIDI converter is *not* connected to the system. When you are ready to install the drivers, you will use a USB connector to connect the MIDISPORT 2x2 USB-to-MIDI converter to your computer.
2. Download the latest MIDISPORT 2x2 drivers from the following Web site: www.midiman.com.

   The system downloads a compressed, executable file.
3. Double-click the file you downloaded to uncompress the driver files to a floppy disk or to a folder on your system.
4. Double-click the Install.txt file included with the downloaded files. This file contains the instructions for installing the drivers.
5. To initiate the driver installation, connect the MIDISPORT 2x2 USB-to-MIDI converter to the system using a USB connector. It is not necessary to connect the external fader to the MIDISPORT 2x2 device.

   The system automatically detects that a new device has been connected and opens the Found New Hardware Wizard dialog box.
6. Follow the instructions in the Install.txt file.

If you uncompressed the files to a folder on your system, two drivers might appear in the list. You can select either one.

Testing the Fader Connections

To test the fader connections:

1. Connect all MIDI hardware devices as described in the *Avid NewsCutter Setup Guide*.

The setup guide instructs you to use the B MIDI connections. The NewsCutter software uses the A connections by default, so use the A connections. If you need to use the B connections, see *"Switching Between MIDI Connections on the USB-to-MIDI Converter" on page 84.*

2. Move the sliders on the fader controller and confirm that the MIDI IN LED indicator on the USB-to-MIDI converter turns on and off appropriately.

   The USB LED indicator pulses — this is expected behavior.

3. Start the NewsCutter application and choose Audio Gain from the Tools menu.

   The indicator lights on the Audio Gain tool should change to blue.

4. If the lights *do not* change to blue, perform the following steps:

   a. Choose Console from the Tools menu.

   b. Locate the following lines in the Console window:

      ```
      Midi In device: In-A USB MidiSPORT 2x2
      Midi Out device: Out-A USB MidiSPORT 2x2
      ```

   c. Check that the MIDI connections on the MIDISPORT 2x2 USB-to-MIDI converter match the connections listed in the Console window (either A or B).

   d. If necessary, quit the NewsCutter application, switch the MIDI cables to match the output in the Console window, and then restart the application.

   e. If the indicator lights are still not blue, recheck the connections according to the instructions in the setup guide.

5. Choose Calibrate Hardware Sliders from the Audio Gain tool Fast menu.

   The Record Status light changes to yellow.

6. Move the sliders on the external fader. The corresponding sliders move in the Audio Gain tool.

Now you are ready to use the fader controller with the Avid application software. For more information, see the *Avid NewsCutter User's Guide* or Help.

Switching Between MIDI Connections on the USB-to-MIDI Converter

By default, the system expects the MIDI cables to be connected to the IN-A and OUT-A connections on the MIDISPORT 2x2 device. If you need to switch from A to B connections, you will need to create a system environment variable as described in this section.

To switch from A to B MIDI connections

1. Check the connections on the MIDISPORT 2x2 USB-to-MIDI converter to ensure the cables are connected to the IN-B and OUT-B connections. For information on connecting the MIDISPORT 2x2 device to the fader controller, see the setup guide.
2. Click the Start button, point to Settings, and then select Control Panel.
3. Double-click the System icon.

   The System Properties dialog box appears.
4. Click the Advanced tab.
5. Click the Environment Variables button.

   The Environment Variables dialog box appears.
6. Click the New button in the System variables area.

   The New System Variable dialog box appears.
7. Type **`OTHER_MIDI_PORT`** in the Variable Name text box.
8. Type **`1`** in the Variable Value text box.
9. Click OK.

   The OTHER_MIDI_PORT entry appears in the System variables list of the Environment Variables dialog box.
10. Click OK.
11. Click OK to close the System Properties dialog box.
12. Start the NewsCutter application and choose Audio Gain from the Tools menu.

    The indicator lights on the Audio Gain tool should change to blue. If the lights *do not* change to blue, see step 4 in “Testing the Fader Connections” on page 82.

To switch from B to A MIDI connections:

1. Check the connections on the MIDISPORT 2x2 USB-to-MIDI converter to ensure the cables are connected to the IN-A and OUT-A connections. For information on connecting the MIDISPORT 2x2 device to the fader controller, see the setup guide.
2. Click the Start button, point to Settings, and then select Control Panel.
3. Double-click the System icon.

   The System Properties dialog box appears.
4. Click the Advanced tab.
5. Click the Environment Variables button.
6. The Environment Variables dialog box appears.
7. Select the OTHER_MIDI_PORT entry in the System variables list and then click the Delete button.
8. Click OK.
9. Click OK to close the System Properties dialog box.
10. Start the NewsCutter application and choose Audio Gain from the Tools menu.

    The indicator lights on the Audio Gain tool should change to blue. If the lights *do not* change to blue, see step 4 in "Testing the Fader Connections" on page 82.

Checking the MIDI Connections

To check the MIDI connections:

1. Start the NewsCutter application.
2. Choose Console from the Tools menu.

   The Console window opens.
3. Check that the USB MIDISPORT 2x2 values (A or B) match the connections you are using on the MIDISPORT 2x2 USB-to-MIDI converter.
4. If necessary, quit the NewsCutter application, switch the connections, and then restart the application.

Antivirus Applications

Antivirus programs containing autoscanning features can interfere with the operation of an Avid application. For example, some antivirus programs can be configured to run in the background and scan *all* files for viruses whenever they are opened, copied, or moved. Since virus scanning is a processor- and disk-intensive activity, it can interfere with recording and playing real-time effects in an Avid application.

Avid recommends that you do not scan *all* files or schedule any background task like virus scanning when you are using an Avid application.

File deletion protection utilities also consume system resources and could interfere with the proper operation of an Avid application. These utilities automatically back up any files that are deleted, even temporary files created and deleted by the Avid application. This consumes a large amount of disk space.

Uninstalling the Avid Application

When an Avid system is ordered directly from Avid, Avid removes the software application prior to shipment. This allows the customer to install the application and accept the software agreement.

To *individually* uninstall the Avid software applications without removing the needed drivers:

1. Open the Control Panel and double-click the Add/Remove Programs icon.
2. Find and select NewsCutter.
3. Click Change/Remove and click Yes when asked if you want to remove NewsCutter, and follow the instructions on the screen.
4. You should click No to any shared file statements that are sent to the screen.
5. Repeat steps 1 to 4 for the Avid Codec and for AvidADI.

Chapter 6

Troubleshooting

This section describes how to create troubleshooting disks and where to locate diagnostics after you have integrated the NewsCutter hardware and software on the Compaq W8000 system. Solutions to some possible problems are also included.

This chapter contains the following sections:

- Creating a Windows 2000 Emergency Repair Disk
- Testing the System
- Troubleshooting Toolbox
- Display Monitor Colors or Resolution Incorrect
- Stripe Sets Cannot Be Seen on System

Creating a Windows 2000 Emergency Repair Disk

The Windows 2000 Emergency Repair Disk (ERD) is vital to the successful restoration of a user's system in the event of a damaged operating system component. The ERD should be updated anytime a change to the operating system occurs. This can happen whenever hardware is added or applications are installed. The ERD is also used to replace missing or damaged system files, restore damaged or incorrect registry information, or rebuild the system startup environment.

The ERD *does not* restore applications or device drivers. Instead, it holds copies of the user environment, software associations, passwords, and information about the system configuration.

The ERD is not a replacement for regular backups. It provides enough recovery to restore a system to a bootable state only.

To create an ERD:

1. Turn on the system and log in to an account with administrative privileges.
2. Click the Start button, point to Programs, point to Accessories, point to System Tools, and then select Backup.

   The Backup window opens.
3. Click the Emergency Repair Disk icon.

   A dialog box appears.
4. Select the “Also backup the registry to the repair directory” option.
5. Insert a blank, formatted floppy disk into drive A.
6. Click OK.
7. When the process is complete, click OK
8. Remove the floppy disk, label it, date it, and store it in a safe, dry, static-free location.

Testing the System

Two diagnostic programs are installed on the system when the NewsCutter application software is installed. Avid System Test Pro tests the Meridien digital media board set in the NewsCutter system and the attached Meridien I/O box. Avid Storage Manager runs low-level diagnostics on drives attached to the system.

Running Avid System Test Pro

The *Avid NewsCutter Setup Guide* that ships with the system contains a section that explains how to run Avid System Test Pro to test the Avid board set. You should restart the system prior to running the diagnostics. Help is also available by pressing the F1 key or choosing Help from the Help menu in the diagnostics.

Running Avid Storage Manager

Avid Storage Manager (ASM) is the next-generation disk exerciser and diagnostics utility used for testing Avid media drives. In NewsCutter Release 3.*x*, ASM replaces the Avid StorEx utility. ASM includes context-sensitive Help. Most windows in the ASM utility include a Help button that, when clicked, will open a browser window and provide information about the current ASM window displayed.

Avid recommends you do not run ASM unless instructed by Avid Customer Support. Many of the utility's functions can destroy the data on the drives.

Testing the Avid Software

Depending upon how familiar you are with the Avid software, you should restart the system and attempt to do the following:

- Click the Start button, point to Programs, and then select Avid.
- Digitize a portion of media.
- Construct and play back a simple sequence.
- Create a title.
- Create and test an effect.

Troubleshooting Toolbox

To troubleshoot the system effectively you should consider creating a "toolbox" of useful software, utilities, and tools that you carry with you when installing or troubleshooting Avid's Windows 2000 editing systems. An Avid Windows 2000 toolbox should consist of:

- *Evo W8000 Hardware Reference Guide* (sometimes referred to by Compaq as a user's guide) can be found in PDF format on the Workstation Reference Library CD that ships with the Compaq W8000 system. You can also find a copy on the Compaq Web site.
- Avid Setup and Product Recovery CD-ROM
- System-specific Emergency Repair Disk
- Avid software CD-ROM
- Disk controller drivers:
  - ATTO dual-channel and single-channel drivers
  - ATTO Fibre Channel board driver
  - Emulex Fibre Channel board driver
- System-specific Windows disk configuration floppy disk if needed
- Saved project and settings floppy disk
- Wrist strap
- TORX®, flat-head, and Phillips screwdrivers

Display Monitor Colors or Resolution Incorrect

Problem

Text and graphics appear in 640 x 480 resolution with 16 colors only.

Explanation/Fix

Windows booted in base video (VGA) mode, either by user selection, or because no display driver is installed. This is common when the proper edit display controller board driver has not been installed and started. See "Installing the Edit Display Controller Board Driver" on page 68 to learn how to properly install the driver. When you are sure the proper driver is installed, see "Setting Your Screen Resolution" on page 70.

Stripe Sets Cannot Be Seen on System

Problem

When you move a set of striped drives from system A to system B, system B sees the set of striped drives physically, but cannot see a file system on the stripe set.

Explanation/Fix

See the *Avid NewsCutter Setup Guide* for information on creating and moving stripe sets on Windows NT® and Windows 2000 systems. The guide explains how to do the following:

- Striping Drives on a Windows 2000 System
- Transferring Disk Drives from Windows NT Systems
- Creating a Disk Configuration Floppy Disk from Windows NT
- Moving the Stripe Set to the Windows 2000 System

Appendix A

Regulatory and Safety Information

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian ICES-003

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Notice

CE

Declaration of Conformity (According to ISO/IEC Guide 22 and EN 45014)

Application of Council Directives:	73/23/EEC, 89/336/EEC.
Standards to which Conformity is Declared:	EN60950:1992 + A1 + A2 + A3 + A4 + A11 CISPR 22:1985 / EN55022:1988 Class A EN55024:1998/EN61000 — 3-2, 4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11
Manufacturer's Name:	Avid Technology, Inc. 1925 Andover Street Tewksbury, MA 01876, USA
European Contact:	Nearest Avid Sales and Service Office or Avid Technology International B.V. Sandyford Business Center Unit 3, Dublin 18, Ireland
Type of Equipment:	Information Technology Equipment

Product Name:	Products for the Windows NT, Windows 2000, or Windows XP Operating System: Media Composer, Film Composer, Avid Xpress, Avid Xpress DV, Avid Unity, Avid Unity MediaManager, Avid Unity TransferManager, Avid|DS, NewsCutter, NewsCutter XP, NewsCutter DV, Symphony, MediaDrive, MediaDock LVD, MediaRAID, MediaNetwork, MediaDock 2+, MEDIArray, MEDIArray II, MEDIArray Drive, MEDIArray II Drive, LANserver, LANserver EX, PortServer, Meridien I/O box, Avid Equinox Break-Out-Box Products for the Mac OS X Operating System: Media Composer, Film Composer, Avid Xpress, Avid Xpress DV, Avid Unity, Avid Unity MediaManager, Avid Unity TransferManager, MediaDrive, MediaDock LVD, MediaRAID, MediaNetwork, MediaDock 2+, MEDIArray, MEDIArray II, MEDIArray Drive, MEDIArray II Drive, LANserver, LANserver EX, PortServer, Meridien I/O box Products for the UNIX Operating System: AirPlay, VideoSPACE
Base Model Numbers:	None
Product Options:	All
Year of Manufacture:	2002

(1) Products for the Windows NT, Windows 2000, or Windows XP Operating System: products were tested in a typical Media Composer, Film Composer, Avid Xpress, Avid Xpress DV, Avid Unity, Avid Unity MediaManager, Avid Unity TransferManager, Avid|DS, NewsCutter, NewsCutter XP, NewsCutter DV, Symphony, MediaDrive, MediaDock LVD, MediaRAID, MediaNetwork, MediaDock 2+, MEDIArray, MEDIArray II, MEDIArray Drive, MEDIArray II Drive, LANserver, LANserver EX, PortServer, Meridien I/O box, or Avid Equinox Break-Out-Box configuration.

(2) Products for the Mac OS X Operating System: products were tested in a typical Media Composer, Film Composer, Avid Xpress, Avid Xpress DV, Avid Unity, Avid Unity MediaManager, Avid Unity TransferManager, MediaDrive, MediaDock LVD, MediaRAID, MediaNetwork, MediaDock 2+, MEDIArray, MEDIArray II, MEDIArray Drive, MEDIArray II Drive, LANserver, LANserver EX, PortServer, or Meridien I/O box configuration.

(3) Products for the UNIX Operating System: products were tested in an AirPlay or VideoSPACE configuration.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

George R. Smith, Director of Hardware Engineering.

Australia and New Zealand EMC Regulations

N1709

John Kells, Australian Operations Manager
Avid Technology (Australia)
Unit B
5 Skyline Place
French Forest NSW 2086
Australia
Phone: 61-2-8977-4800

Taiwan EMC Regulations

Taiwan EMC Regulations BSMI Class A EMC Warning

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

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